

*W. Bergman*

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Volume 1

**PROCEEDINGS of the  
17th DOE NUCLEAR AIR CLEANING CONFERENCE  
Held in Denver, Colorado  
2–5 August 1982**

**Sponsors: U.S. Department of Energy  
The Harvard Air Cleaning Laboratory**

**Editor  
Melvin W. First**

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## FOREWORD

The Seventeenth DOE Nuclear Air Cleaning Conference was held in Denver, CO., August 2-5, 1982, under sponsorship of the U.S. Department of Energy (DOE) and the Harvard Air Cleaning Laboratory. Attending the conference were 260 air cleaning specialists from the United States, Belgium, Canada, the Federal Republic of Germany, France, Italy, Japan, the Netherlands, Portugal, Spain, Sweden, the United Kingdom, and Yugoslavia.

The conference agenda included sessions on the definition of nuclear power plant source terms; the behavior and transport of specific radionuclides under accident conditions; performance standards, procedures, and instruments for evaluating the efficiency of air cleaning systems; air cleaning requirements for spent fuel reprocessing; special approaches for the control of  $^{14}\text{C}$ , radioiodine, and the noble gases; development of computer models for evaluating component failures in air cleaning systems and the performance of specific systems under normal and accident conditions; contamination control and personnel protection; repair requirements and failure rates in air cleaning systems; and problems related to quality assurance.

A meeting of the Government-Industry Committee on Filters, Media, and Media Testing was held immediately prior to the opening of the conference to provide a forum for the exchange of viewpoints between suppliers and users of air cleaning equipment and the presentation of reports by various task groups addressing specific issues and developing air cleaning standards.

A conference of this size and complexity requires the dedicated service and wise counsel of many. The Chairman of the 17th DOE Nuclear Air Cleaning Conference wishes to record his appreciation of the firm support and willing assistance provided by the Program Committee throughout the lengthy planning process and during the Conference, itself. In addition to the Program Committee, many at the Rocky Flats Plant of Rockwell International in Boulder, notably Mr. W.D. Crossland and Dr. R.E. Yoder, and each of their staffs, provided essential local support for the Conference. Administrative support for the Conference and preparation of the Proceedings was ably provided by Mrs. Joan Sullivan at the Harvard School of Public Health.

Melvin W. First  
Program Chairman

# 17th DOE NUCLEAR AIR CLEANING CONFERENCE

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